AGRICULTURAL CREDIT IN THE UNITED STATES

SUMMARY

I. Existing Conditions. Classes of agricultural credit, 701.— Growth of farm mortgage indebtedness in the United States, 703.— Statistics, 704.— Causes, 705. — North versus South, 707. — Significance, 709. — Sources of farm mortgage credit in the United States, 712. — Rates of interest on farm mortgages, 718. — Averages in different sections, 718.— Elements of cost, 719. — Personal indebtedness of the American farmer, 721. — Statistics, 722. — Sources of personal credit, 723. — Its cost, 724. — II. Proposals for reform. Agitation for improvement of agricultural credit facilities, 727. — Agricultural credit in Germany and France and comparison with conditions in the United States, 729. — The debenture bond system; its limitations, illustrated by European experience; its unfitness for use in the United States, 734. — Futility of direct state financial aid to agriculture, 739. — Agricultural credit bills now before Congress, 740. — Criticism and conclusion, 746.

THE purpose of this article is to inquire into conditions of agricultural indebtedness in the United States, to indicate the credit facilities of the American farmer and to consider the plans suggested for their improvement.

I. EXISTING CONDITIONS

The farmer may need credit for:

1. Land acquisition, through purchase or inheritance.
2. Permanent improvements, such as buildings, fences, drains.
3. Equipment, including machinery, implements, work animals.
4. Working capital, including expenditures for fertilizer, seed, fodder, fuel, labor.

Credit for land and improvements is usually termed ownership credit; and since it is granted for a comparatively long time on mortgage security, it is referred to as mortgage or long term credit. Working credit, on the other hand, since it is granted for a comparatively short time, and since the personal factor is the chief element in its security, is referred to as personal or short term credit. Equipment credit, tho more like improvement than like working credit when viewed from the standpoint of production, must be classed, on account of its comparatively short term and the importance of the personal element in its security, as short term or personal credit.

It may be broadly stated that previous to the last quarter of the nineteenth century American farmers felt little need of credit. They had been given their land by the Government or had bought it at comparatively low prices. Since agriculture was extensive, expenditures for improvement and equipment were inconsiderable. The virgin soil needed no fertilization, and credit was seldom required except for family supplies during the crop growing period.

The western movement, which began to assume large proportions about the middle of the nineteenth century, resulted in the opening of vast areas of fertile land adapted to grain growing and of free grazing land on which live stock could be raised at low cost. This resulted in a tremendous surplus of agricultural products, which, owing to the development of railroad and ocean transportation, was thrown on the markets of the world,[1] bringing prosperity to the farmers of America and ruin to those of Europe.

[1] The exportation of cereals did not begin to assume large proportions until 1855, but from this time until 1890 it was tremendous. Between 1873 and 1890 the area under cereal cultivation doubled. From 1880 to 1890 the exports of wheat increased 300%, while the increase of corn exports was even more marked. The exports of

Partly as a result of this overwhelming flood of production and partly on account of the speculation and inflation which followed the Civil War, a great increase in land values took place. This gave farmers a broader basis for borrowing and they took advantage of it to make improvements and to add more land to their farms. Tempted by the high rates of interest and deceived by the reported endless wealth of the new west, eastern and European capitalists made loans altogether too freely and often on the security of land practically worthless or located in regions of uncertain crops. The upward movement culminated in the early '90s; grain farming reached its climax and over-production brought the inevitable fall of prices and of land values.

Mortgage Indebtedness

Farmers now began to feel the burden of their great mortgage indebtedness, which had grown enormously during the preceding decade and which had been incurred largely for unproductive purposes.[1] Many could not pay their interest, and as it often happened that the selling price was less than the amount of the mortgage, foreclosures were common.[2] This collapse caused wide-spread discontent among the farmers and

cereals during the decade 1880 to 1889 were three times as great as those of the decade 1860 to 1869. The export of livestock products increased 406% from 1870 to 1881. The value of the exports of American breadstuffs increased from $24,000,000 in 1860 to $288,000,000 in 1880, while the value of livestock products exported rose in these years from 16 million to 156 million dollars.

[1] George K. Holmes estimates that the ratio of mortgage indebtedness to wealth increased more rapidly from 1880 to 1890 than from 1870 to 1880, and that the debt limit was more nearly approached in 1890 than in 1880. Annals of American Academy, 1894, p. 910.

[2] In Michigan, for example, there were, in 1888, sixteen hundred and sixty-seven foreclosures with only one hundred and thirty-one redemptions. Political Science Quarterly, vol. v, p. 72.

Of agricultural loans in Indiana amounting to one million dollars, fifty-three per cent were foreclosed; and in some states, Kansas and Nebraska, for example, conditions were much worse. Political Science Quarterly, vol. v, p. 71; ibid., vol. iv, p. 436, et seq.

as a consequence many investigations into conditions of rural indebtedness were instituted. The United States Census undertook for the first time an investigation of mortgage indebtedness. The inquiry was not included in the agriculture schedule, but special agents, sent to one hundred and two typical counties, made an investigation which served as a basis for an estimate of the total mortgage indebtedness of farms operated by their owners. This total was estimated at $1,085,995,960.[1]

Prices of farm products reached their lowest point about 1896, but land values continued to fall until 1900. The low prices discouraged production, and the increase in cereal production between 1890 and 1900 was only 19%, whereas there had been an increase of 34% during the preceding decade. In many of the great agricultural states soil fertility had begun to decline and the increase in production which did take place was due not so much to more intensive or better farming as to the taking up of new lands west of the Missouri.[2]

The Census of 1900 did not secure data on farm indebtedness and there are no statistics of its movement from 1890 to 1900. The census of 1910 secured, on the regular agricultural schedule, information regarding the amount of mortgage indebtedness on farms operated by their owners. Since returns had been made for only 75% of such farms, about 25% of this debt was estimated. The result was a total debt of $2,293,000,000, — 110% greater than the debt of similar farms in 1890.[3]

[1] The methods by which the Census arrived at these results have been severely criticized, and the accuracy of the results questioned. But the writer, while fully appreciating the shortcomings of these statistics and of census data in general, believes that they are sufficiently accurate to indicate tendencies.

[2] The acreage in cereals increased 35% during this decade, while the production of cereals increased only 19%, whereas during the preceding decade the acreage increased 16% and the production, 34%.

[3] The statistics of 1890 are not comparable with those of 1910, since they did not distinguish between farms consisting exclusively of owned land and those consisting in part of rented land. But this difference does not materially affect the validity of the comparison. Thirteenth Census, vol. v, Agriculture, p. 101.

The question naturally arises; for what purpose was this huge additional debt incurred? The census did not inquire into the subject, but George K. Holmes estimates that about 64.4% [1] of the total debt in 1890 grew out of ownership, either through purchase or through inheritance; and he thinks that probably this statement is equally applicable to the year 1910. When land values increase, ownership becomes more difficult, and the increase of mortgage indebtedness is inevitable.[2] During the period 1890–1910 the value of land and its improvements for the country as a whole increased 100%, and this, coupled with frequency of land transfers, resulted in a great increase of mortgage indebtedness.

The farmer has also made heavy expenditures to raise his standard of living and has spent large sums on improvements and equipment and in working capital. The value of buildings, apart from that of the land, was not given by the Census of 1890, but was given in 1900 and 1910, and comparison shows an increase of 77.8%.[3] During the same decade value of implements and machinery increased 68.7%, while the expenditure for labor increased 82.3%, and that for fertilizer, 115%.[4] These increased expenditures for equipment and operation are the result of the normal development of agriculture, since they arise out of a growing necessity for greater intensity of cultivation. Animals are of better quality and require better housing. More thoro cultivation calls for a larger expenditure for labor or increased employment of machinery. Declining soil

[1] Holmes, George K., Rural Credit in Business America, February, 1913, p. 126.

[2] According to Trosien, the more valuable land becomes, the more borrowed capital is necessary for purchase, and hence the lower becomes the percentage of own capital in agriculture. Trosien, Der landwirtschaftliche Kredit und seine durchgreifende Verbesserung, p. 29.

[3] Thirteenth Census, 1910, vol. v, Agriculture, p. 79.

[4] Ibid., p. 372.

fertility may force the farmer to resort to artificial fertilizer. It is possible that these added items of expense may not be reflected in increased production and must, therefore, be wholly met out of an increase in prices. But should such an increase in prices not take place, the additional expenditures would have to be met out of the farmer's capital, which must ultimately increase his mortgage indebtedness. That this is frequently the case the history of agriculture affords abundant evidence. A recent writer, speaking of conditions in a certain locality, says the demand for mortgage credit exceeds the supply, owing to the transformation of short term into long term loans. Trosien remarks that personal debts tend to become mortgage debts, while second mortgages often arise from the capitalization of unpaid interest on the first.[1] Consolidation of past debts is given as the greatest cause of mortgage indebtedness in Saskatchewan.[2] In the United States, undoubtedly, no inconsiderable part of the indebtedness incurred through these expenditures has been converted into mortgages; and this, therefore, may be considered as one of the causes of the increase of mortgage indebtedness. But the fact should not be lost sight of that during the period under consideration there has been an enormous rise of prices, which has not been taken advantage of to reduce mortgage indebtedness or prevent its increase or to stimulate production. After due allowance has been made for the growing difficulties in the way of declining soil fertility and the like, the fact remains that there has been an enormous expenditure which should be reflected in increased production; but no such reflection can be discovered. Enormous sums have been spent for buildings, implements, machinery, labor and fertilizers, and yet there has been

[1] Trosien, p. 21.

[2] Commercial West, November 8, 1913, p. 34.

no appreciable increase in the average yield of staple crops; and tho the census is probably mistaken in reporting a decline in the volume of dairy products, there has probably been no great increase.

The farmers of the South depend much more on personal credit than do those of the North. 45% of the farms in the West Central States are mortgaged, while in the South Atlantic states but 13% are mortgaged and in the South Central, 8.2%. In Iowa 51% are mortgaged; and in Alabama, 26%. The reasons for this difference are various. Among them may be mentioned the fact that much of the land in the South is held in large tracts, which are usually broken up into small farms under tenant cultivation. And while the owners of such tracts may often secure money at favorable rates, this system of farming does not adapt itself to large mortgage loaning. In the case of the southern owner who himself tills the farm, the system of agriculture is such that the security offered is not attractive to outside capital. Agricultural practices are not standardized; loans are small; the general prejudice of the owner against a mortgage, the prevailing sentiment that a mortgage on the farm greatly impairs the mortgagor's personal credit, large homestead exemptions, and lack of adequate laws to protect the investor have retarded mortgage loans in the South, while low land values and infrequent transfers have also been important factors in keeping down mortgage indebtedness. As a result permanent improvements, which must be made largely from mortgage loans, have not been made. But a tremendous change in this regard has been going on in the South during the past twenty years and particularly during the last decade. While homestead exemptions and laws protecting credit have undergone little change, ownership has greatly increased

among both white and colored farmers.[1] Agricultural conditions have become more stable; land values have risen and are much less speculative than in the North; improvement expenditures show a marked increase and while the percentage of farms mortgaged [2] and the absolute indebtedness are low in the South as compared with the North, the per cent of increase in mortgage indebtedness in the former section has been very much greater. For example, the increase of mortgage indebtedness for the North Central states was 59%, while the increase for the South Central was 190%.[3] For Iowa, which has the heaviest mortgage indebtedness of all the northern states, the increase was 100%, while for Alabama it was 437%.[4] Altho the rates on mortgage loans are much higher in the South than in the better developed agricultural regions of the North, the burden of mortgage indebtedness is much lighter in the South. In much of the South agricultural conditions to-day are very similar, as regards the return on investment, to those which prevailed in the great Middle West a generation ago.[5] High interest rates are off-set by large profits; the short term of the loan, which is from three to five years, is usually sufficient time for the farmer to pay off his debt if he is so inclined.

[1] Thirteenth Census, Abstract, p. 293.

[2] Ibid., p. 293.

[3] Ibid., p. 293.

[4] Thirteenth Census, vol. vi, pp. 508 and 521.

[5] The census data afford only a very crude approximation to the relation of income to investment, but after due allowance is made, the following figures show conclusively the correctness of this statement. In Yazoo County, Mississippi, farm lands are valued at $10 to $25 an acre. The average gross income per acre is $28, while the average mortgage indebtedness per acre is $1.80. In Cass County, Iowa, the land values are from $100 to $125 per acre while the gross income per acre amounts to $11 if only crops and dairy products are taken into account and to $20 if the sales of live stock are included. The average mortgage indebtedness is $27 an acre. In Oglethorpe County, Georgia, the average value of land is from $10 to $25 an acre, the average income is $10, the average mortgage is $2. In Paulding County, Ohio, land is valued at from $75 to $100 per acre and the average income per acre, including returns from livestock sold, is $15. The average mortgage indebtedness is $10.

Beyond the expenditure necessary to maintain the former level of production, which may eventually mean an increase in mortgage indebtedness, any further increase in such indebtedness should indicate expansion; that is, an increase in production. In Germany, for example, while mortgage indebtedness has greatly increased, during the last quarter of the century, there has also been an enormous expansion in agriculture. Helfferich shows that the yield of wheat, rye, oats, barley, potatoes and hay increased 77.7% during this period, while the acreage increased 87.7%.[1] Similar figures might be given for Denmark. In the United States, however, the increased mortgage indebtedness is not reflected in increased production. Agricultural prosperity has been almost solely due to an increase in prices.

Some writers maintain that this is not a serious matter, since, owing to the rise of land values, the farmer now has, on an average, despite his heavier mortgage indebtedness, a greater equity than before, shown by the fact that in 1890 the mortgage debt on farms operated by owners was 35.5% of their value, while in 1910 it was but 27.2%. But the argument seems to the writer fallacious. The real measure of the prosperity of the farmers as a class is not the amount of their equity but the net return on their investment. Altho an increased equity, not accompanied by a corresponding increase in the net return on investment, is of course a gain to the farmer who wishes to sell, it is of no material advantage to the one who wishes to hold his farm and whose income is sufficient for his needs; while a new owner, whether by purchase or by inheritance, is actually worse off, despite his increased equity, than if the land had not increased in value, because of his larger interest

[1] Annalist, October 20, 1913, p. 492.

payments and the fact that the mere acquisition of the land has depleted his working funds. To quote from the report of a recent investigation, " where land values are high, the amount of money invested in working capital becomes proportionately small." This refers to conditions in Indiana, Illinois and Iowa.[1] And Trosien states that the higher the price of land rises, the more difficult does it become to secure capital for its proper working.[2]

The significance of equity becomes clearer if farming is viewed as a business which is successful only if it yields a fair return on the investment and pays the farmer fair wages of management. That this is not the case in our most advanced agricultural regions has been clearly brought out by the report of the above-mentioned investigation of farming conditions in Indiana, Illinois and Iowa. Two hundred and forty-seven rented farms were investigated, with the result that the average return on their investment to the landlords in these states is shown to be 3.5%, 3.6% and 3.2% respectively. In the case of 273 farm owners who tilled their farms, the average labor income left after the deduction of 5% interest on the capital was $408. " One owner out of every three paid for the privilege of working his farm, that is, after deducting 5% interest on his investment he failed to make a plus labor income." And the farm owners, with an average investment of over twelve times that of the farm tenants, made less than half as much labor income. The bulletin concludes that the farmers of these regions who are owners are living on the earnings of their investment and not on the real profits of the farm.[3]

[1] Bulletin 41, United States Department of Agriculture, p. 20.

[2] Trosien, p. 23.

[3] Bulletin no. 41, United States Department of Agriculture.

It is not at all certain that this increased equity is stable. It is evident that part of the increase has resulted from land speculation; and since production has remained about stationary, the rest must be credited to the rise in prices of farm products. These prices are now so high that any further rise must either curtail consumption or stimulate importation, and is therefore improbable. Indeed it is doubtful whether the present high prices will continue even if there is no interruption of general prosperity. For in normal times a change of agricultural prices is always imminent,[1] and with prices at their present high level any change would probably be a decline. This might easily cause a diminution of the farmer's income which would result in a fall of land values sufficient to wipe out much of the increase in his equity and to add still further to the burden of his mortgage debt.[2]

The writer is not of the opinion that the average mortgage indebtedness of the American farmer is excessive. In a country so rich agriculturally, a mortgage debt of $2,793,000,000 [3] is no cause for alarm; and in general, an increase of the agricultural indebtedness of a country is usually a sign of prosperity. But it is a sign of prosperity only if the increase of land values on which the additional mortgage debt is based has been caused, not by speculation or by an abnormal rise in the prices of products, but by an actual increase in the volume of production. It is essential not only to the

[1] "Relations between physical production and pecuniary value are exceedingly irregular with agricultural products." Mitchell, Business Cycles, p. 239.

[2] Seasonal variation and fluctuating prices have a marked influence on the profits from farming in the districts studied in Illinois, Indiana and Iowa. The average price received for corn sold by the landlords of the two hundred and forty-seven tenant farms was $.41, and a drop of $.05 alone would have reduced the income 6%. Bulletin 41, United States Department of Agriculture.

[3] Holmes, Business America, February, 1913, p. 124.

welfare of society in general but also to the security of the farmer himself that any increase in the returns from agriculture shall have resulted mainly from an increase of production rather than from high prices.

Sources of Mortgage Credit

The principal sources of mortgage credit are: (1) the individual lender; (2) the life insurance company; (3) the bank; (4) the state; (5) the mortgage company; (6) the building and loan association. These will be considered in the order stated.

(1) In most communities there are individuals willing to loan to their neighbors, because through personal supervision they can minimize risks which exclude outside lenders, and because by loaning directly they avoid paying the middleman's commission. This form of credit offers certain advantages to the borrower, but it lends itself to abuse. It plays an important rôle in this country, but no statistics concerning it are available.

(2) Perhaps the most important source of farm mortgage loans is the insurance company. It has been recently estimated [1] that 172 of the leading life insurance companies have outstanding rural loans to the amount of $572,000,000, or about one-fifth of the entire agricultural mortgage indebtedness. They operate in all parts of the country where agricultural conditions are sufficiently well established and where land values are high enough to furnish adequate security for a fairly large loan. Great caution is exercised and the inclusion of a locality in the territory of one of these companies is evidence of that locality's prosperity and good stand-

[1] Badow, G. M. J., Investments of Life Insurance Companies. Rand McNally Bankers' Monthly, June, 1913, p. 17.

ing. But even in good sections, loans on small farms are not favored.[1] The companies not infrequently make their investments through well-established mortgage companies but they usually act through local agents thoroly acquainted with the conditions in their districts. These agents make the appraisals and exercise general supervision over the loans. The company, however, employs its own attorney and inspectors, who pass final judgment on the valuations, titles and papers submitted by the agents.

Each year sees an increase in the investments of life insurance companies in farm loans. This is due to the improvement of the average risk, to growing confidence in the security of such loans and to the comparatively high rate of interest [2] which they yield.

(3) In general, it is not the function of a bank to make mortgage loans. Not until the passage of the Federal Reserve Act of 1913 were national banks permitted to loan on real estate, tho it has been their common practice to take real estate mortgages as added security for personal loans. Section 24 of the Federal Reserve Act provides that any national bank not situated in a Central Reserve city may make loans on improved farm land, not to exceed 50% of the actual value of the property offered as security and for a period not exceeding five years. The bank may make such loans in an aggregate sum equal to 25% of its capital and surplus, and to 33⅓% of its time deposits.

[1] One of the largest companies, with practically all its assets in farm loans, reports their average size to be $1782. Since the company loans up to but slightly over 25% of the farm values, it is evident that the small farmer obtains no assistance from this source.

[2] In 1913 the average interest on the assets of insurance companies investing in

Farm loans and stocks was	5.08%
Farm loans and no stocks was	5.57%
No farm loans and no stocks was	4.75%

Rand McNally, June, 1913, p. 24.

What is likely to be the result of the new policy thus inaugurated ?

For years there has been agitation both within and without the ranks of the national banks, for the adoption of this policy; and now that it has finally been adopted, it is heralded as a great boon to agriculture. In a recent statement from the Treasury Department (reported in the daily papers of June nineteenth), attention was called to the fact that at the present time $500,000,000 is available for farm mortgage loans. The writer, however, does not share the belief that the making of real estate loans by national banks is in accordance with the principles of sound banking, and even if it were, he does not believe that such loaning would prove profitable to the banks or convenient for the farmers.

A bank's primary function is to make possible the employment of capital temporarily out of use. This it does by establishing a reservoir of liquid funds known as deposits. It should not act as a primary agent of investment, even to the extent involved in making five year mortgage loans. The resources of a bank should be kept so liquid that they will be immediately available in times of stress. The time deposits of even the country national bank do not bear the same relation to the bank as the savings deposits bear to the industrial savings bank. The restriction of the amount to be loaned to 33⅓% of the time deposits and of the term to five years is an admission of this fact. Yet it is difficult to see why this five year restriction was made, since from the standpoint of a bank a five year loan is no more liquid than a ten year loan.

Further, in meeting the demands of farmers for personal loans, the bulk of which run for a period of from six months to a year and are therefore not short time

loans in a strict sense, national banks are subjected to as great a strain as they should be called upon to bear.

The banks are not likely to find it profitable to make the permitted mortgage loans, since the rate could not be higher than that on commercial loans; while farmers can secure loans locally from individuals or from outside sources at lower rates. In Illinois or Minnesota, for example, farmers to whom a National bank would care to loan on mortgage can secure loans on their farms at a rate below that which the bank charges on their personal loans and even lower than that paid the bank by the local merchant. Even if it be granted that under certain conditions it would be to the bank's advantage to make the mortgage loans, a five year term would be too short if the loan was required for purchase. It is to be born in mind, also, that a farmer who would have to resort to mortgaging for improvements or equipment would already have a mortgage on his farm and could therefore not offer acceptable security to a national bank.

The conclusion is inevitable that the newly-authorized loans cannot become important. This is overwhelmingly borne out by the experience of our state banks and by that of European banks. It is interesting to note in this connection that the Scotch banks, which have been wonderfully successful in meeting the demands of agriculture, do not, if they can avoid it, accept real estate as security.[1] One cannot but suspect that a great deal of the clamor for the law permitting national banks to make mortgage loans has been raised by men ignorant of banking principles, eager to propitiate those who regard the national banks as oppressors, or by bankers who have permitted their judgment to become warped.

[1] Senate document 214, 63d Congress, 1st Session, p. 827.

State banks have not been restrained by law from making mortgage loans but have not taken them to a great extent. Indirectly, however, by acting as agents of outside investors, both national and state banks have made enormous sums of capital available to farmers. Unlike these banks, trust companies and savings banks have in trust funds which may safely be loaned on mortgage.[1] But while the trust company has performed a very important service in the matter of making agricultural loans, savings banks, which are largely confined to our industrial centers, have found urban loaning more profitable.

(4) Some States loan to farmers from the permanent school fund. Up to the present time, this has but slightly influenced the farm mortgage situation, but recent agitation favors a greater liberality in this practice. Authorities have rightly felt, however, that these funds should not be loaned without adequate security, and farmers who can offer such security would have no trouble in obtaining loans elsewhere.

(5) During the last quarter of the nineteenth century numerous mortgage companies were organized which obtained their funds through the sale of debenture bonds. Through unscrupulous management and lack of public supervision many of these companies were led into careless and excessive loaning which involved them and their gullible investors in the collapse of the early '90s. Some, however, were conservatively managed and are still in existence, and at present mortgage companies are playing an important rôle in the making of farm loans, altho the issue of debenture bonds has been practically given up.

[1] "The demand for trust companies in country districts has been not inconsiderable. Trust companies supply a large part of the farm loanings, either retaining the mortgages or selling them to clients outside the district, by which they succeed in drawing outside capital to the community." American Banker, July 12, 1913.

There are two classes of mortgage companies. The first class are really mortgage brokers. They are without resources and are therefore not in a position to assume financial responsibility. They receive the farmer's application, appraise his property, draw up the papers and on finding a purchaser of the mortgage, pay over the sum to the farmer. As agents, they collect the interest and generally supervise the loan. The objections to such companies are: that the farmer must wait for his loan until a purchaser can be found; and that, in case of defaulted interest or of foreclosure the inconvenience falls on the investor.

The second class of mortgage companies occupy the position of underwriters. On the farmer's application the company makes an appraisal of his farm and if willing to grant the loan does this, after the necessary preliminaries, in its own name and from its own resources. It then sells the mortgage to the investor and endorses it to him. But if the loan is too large to be made by a single investor the company itself retains the mortgage and sells serial bonds issued against it. The company guarantees the title, collects the interest and advances it in case of delay, and generally supervises the loan. It keeps the investor's money constantly employed by reinvestment in new mortgages as the old ones become due.

(6) The building and loaning associations, which are now found in practically all parts of the country and which have rendered great service to home buyers in our smaller cities and towns, until very recently took mortgages on urban property only; but in the older parts of the country they are now attempting to extend their activities to the country districts, and in some localities their loans to farmers have begun to assume considerable proportions. For example, the Ohio Building and

Loan Associations have outstanding at the present time five thousand loans, amounting to over $11,000,000. The loans run from one to sixteen years.[1] The associations have shown themselves capable of adaptation to the peculiar needs of farmers, and there is every reason to believe that they will become a fruitful source of farm loans.

In a country so extensive and of such widely varying conditions, it is impossible to determine the average rate the farmer is paying. On the basis of similarity in mortgage conditions the country may be divided into three regions: the older sections of the North and Middle West, the South, and the newer sections of the West and Northwest. But it should be borne in mind that even within these regions rates vary greatly between communities, and even between farmers of the same community.

In the most favored sections of the North the rate is about 5.5%, plus a 2% commission distributed over five years, which makes the cost of the loan about 5.9%. The commission covers all expenses save the registration fee. In the less favored sections the rate is ½% to ¾% higher, that is, it varies from about 6.4% to about 6.65%. The North and Middle West bear about 60% of the entire farm mortgage indebtedness of the country.

In the South the majority of the borrowers pay 6.5% plus a 2% annual commission, or 8.5%. This section bears about 20% of the total mortgage indebtedness of the country.

In the West and Northwest the rate is about the same as in the South. This section bears about 20% of the mortgage debt of the country.

[1] Paper by K. V. Haymaker, read before the Ohio Building Association League, Marietta, Ohio, October 15, 1913.

But there are numerous exceptions to these statements of rates. Many farmers are able to borrow money at from four to five per cent [1] while in the South and in the newer sections of the United States, loans not infrequently pay 10% interest, with the addition of a three to five per cent annual commission.

Rates may also be approximately estimated from the yield of mortgage loans to investors. The usual rate offered to investors by mortgage companies making loans in the northwest is 6%, tho the rate varies, according to the risk, from 5.5% to 7%. In the South the usual rate is 7%, tho some loans are made at 6%. The commissions charged by the companies vary, according to risk and competition, from 1% to 3%.

The president of a mortgage company located in the extreme Northwest states that in order to cover expenses and make adequate profits the mortgage company must have an annual margin of at least 1.5% above the rate quoted to the investor. In other words, in that region the farmers who are more favorably situated pay from 7% to 7.5%. The annual margin on the less desirable loans is probably from 2% to 3%, and the interest is from 8% to 9.5%. The president of a company located in the Middle West states that its mortgages net the investor from 5.5% to 6%, that the cost of making the loan is .7% and that the additional charge for profit makes the cost to the farmer from 7% to 7.5%. These figures are significant in connection with the fact that the company has outstanding mortgages to the amount of $15,000,000, and that it will not do business in a community which does not annually furnish mortgage paper amounting to $200,000.[2]

[1] Loans at these rates, however, are on the best risks and are made only by insurance companies and individuals. The mortgage companies cannot afford to make them since the rate is too low to allow the necessary profits.

[2] It is evident from these figures that the statement frequently given out by advocates of better credit facilities grossly exaggerate the excess interest the farmer is sup-

The local middleman plays an important part in mortgage loaning in the United States. While the better organized mortgage companies urge the farmer to deal directly with them, he nevertheless often pays a commission to a third party for telling him where he may secure a loan, and in many parts of the country there are middlemen who perform no other function. In certain sections, however, the isolated position of the farmer, his ignorance of business, his lack of system and his dependence on outside capital make a middleman who is familiar with him and his affairs a necessity. So varied are the conditions under which such a middleman acts that it is practically impossible to generalize as to the cost of his services; but in most cases it is not exorbitant.

The period of a mortgage loan is an important element in determining its cost. In the United States, as a whole, the usual period is five years, but in the South small loans are often made for three years and in the best regions of the North some loans are made for ten. In the early history of mortgage loaning, loans were small in proportion to the productivity of the land and there was some economic justification for the three or five year term, since a loan could often be paid off within that time; but this is no longer the case for a large part of the country, tho it still holds true in the South and the newer sections of the West. With so short a term, frequent renewals are necessary, and the expense and uncertainty involved impose a needless burden on the borrower. The usual excuse for the short term is that, since the mortgage contains no clause providing for foreclosure in the case of depreciation or for partial payments, the short term is the lender's only

posed to be paying since the bulk of mortgage indebtedness is not bearing the rate of interest on which they are basing their calculations. President Taft, in his letter of October 11, 1912, to Ambassador Herrick, is made to say that the average rate of interest on the entire mortgage debt is 8.5%. Senate Document 957, Sixty-second Congress, Third Session, p. 4.

means of self defense. But this is a poor argument, since the farmer would doubtless consent to the inclusion of such a clause if he could thereby secure a longer term with the privilege of making partial payments. The real reason for short periods is to be found in the desire of the investor or his agent for commissions on renewals. In partial extenuation it may be noted that the initial cost of making a loan is often so great that if the hope of future profits from renewals were to be eliminated initial commissions would have to be made larger.

Another element of the cost of the mortgage loan is the expense of registration, of searching and perfecting titles, of abstracting and so forth. This is sometimes made an extra charge. The registration fee, which in many states is merely nominal, is always paid by the borrower. In some states, however, its amount depends on the length of the document and therefore bears no relation to the amount of the loan. Often it is a grievous burden on the small borrower. Some states have introduced the Torrens system of title registration, thereby reducing the expense to a minimum. In other states abstract companies have done much to reduce these costs. In the South, however, such companies are not common and since the records must be searched from the beginning for each new mortgage, the cost is high.

Personal Indebtedness

There has been no general investigation into the amount of personal indebtedness of the American farmer. Holmes [1] estimates the total rural indebtedness to be \$5,000,000,000 of which \$2,795,000,000 [2] is

[1] Business America, February, 1913, p. 121.

[2] \$500,000,000 of this amount is mortgage debt on farms operated by tenants.

real estate credit and the rest is personal credit distributed as follows: chattel mortgages, $700,000,000; liens on crops other than cotton, $450,000,000; cotton crop liens, $390,000,000; unsecured debts to local merchants, $250,000,000 and other unsecured debts, $410,000,000.

With regard to its source personal credit may be classified as: (*a*) merchant's credit, including store credit, dealer's credit and factor's credit; (*b*) bank credit.

The practice among storekeepers of selling to farmers goods to be paid for after the harvest is almost as universal as agriculture itself. It is less prevalent in regions of diversified farming, where the farmer, from the sale of eggs, poultry, milk, etc., has a weekly income available for ordinary household expenses. But where this is not the case store credit flourishes even if banking facilities are good. This is due partly to the convenience of the system, partly to the failure of farmers to realize that in paying the "credit prices" of the storekeeper, they are paying him a rate of interest higher than they would have to pay the bank and partly to the fact that the storekeeper can give credit to farmers who would be unable to obtain it from the bank. The amount of this ordinary store credit cannot be estimated; altho on the whole it has declined in this country, it is still enormous.

There exists, however, in the South, a far more important form of store credit. The local merchant not only gives credit for the ordinary family supplies, but in reality finances the growing crop, — contracting to make a definite loan to be taken in commodities. If the farmer is an owner or a responsible tenant, the merchant makes the loan directly and may take a mortgage on the crop. He may even prescribe the kind

of crop to be grown, lay down general rules for its cultivation, supervise it in every stage of its growth, and insist on its sale to him when harvested. But otherwise the loan is made through the landlord, who assumes the responsibility of payment. This form of credit is due to special economic and social conditions, — the constant shifting of the rural population [1] and the fact that a large part of this population are of a race still in its economic infancy, — rather than to any lack of banking facilities. For the majority of such farmers cash credit is out of the question, since they would not use it for making their crop but would squander it. A bank, however, often lends the merchant the money for buying the supplies to be advanced to the farmer. As an inevitable result of the expense and risk of granting this form of store credit, its cost is high, and the system undoubtedly lends itself to grave abuses. With the development of economic sense, it is declining; but without such credit independent farming would have been impossible for a large part of the southern farmers.

The substitution of expensive machinery for labor is a marked characteristic of American agriculture, and a large part of this machinery is supplied on credit by the manufacturer,[2] who takes the dealer's or the farmer's notes and in case of need discounts them, sometimes at the farmer's own bank [3] but more often at some metropolitan bank. This form of credit, known as dealer's

[1] In 1909, 33⅓% of the white farmers of the South and 36% of the colored farmers had occupied their farms for one year or less, while of the tenants, who constituted about one-half of all the farm operators, 75% had occupied their farms for four years or less.

[2] The International Harvester Company declares that one-third of its business is on a time basis for a period longer than they care to have to sell on. Report of the International Harvester Company, United States Bureau of Corporations, 1913, p. 285.

[3] Farmers' notes show a slight decrease in amount, while agents' notes are increasing. The International Harvester Company did not favor discounting at the local banks, since the dealers usually cash the notes and take the discount themselves. Ibid., p. 285.

credit, flourishes even in regions where farming is well established and credit highly organized. There has been much discussion as to the cause of this condition and it is urged that the farmer pays more for this credit than he would for bank credit and that the manufacturer is often embarrassed for lack of funds to carry on the business. But there are certain good reasons for the existence of the system.

First, such credit is easily obtained. The dealer knows that the farmer's credit is good and that he can add enough to the price to make up for bad debts. Knowing that the farmer will buy more on credit, he does not encourage cash payment. A second reason is that the manufacturer can give credit for a longer period [1] than can the bank and that the security, which consists largely of the machine itself, is more acceptable to him than to the bank. Finally, the farmer often prefers to save his bank credit for other purposes.

In the past grave abuses have grown out of this form of credit. Farmers have been led into extravagant purchase of machinery and have involved themselves and the manufacturers in ruin. But tho there is still room for improvement, the past ten years have witnessed a revolution. While still willing to sell on time,[2] manufacturers have put their business on a higher plane. Their rates of interest are the same as those of the local bank and they exercise greater care than formerly in granting credit and are able to sell on time at practically cash prices.[3]

In factor's credit the loan is made, not in supplies but in cash, tho the purpose for which it is to be used

[1] The International Harvester Co. is extending time sales to articles formerly sold only for cash.

[2] The period varies from one to three years, but the two year period is increasing most markedly. Report on International Harvester Co., p. 284.

[3] The notes bear interest before and after maturity; one price is quoted, and a discount allowed thereon for cash payment.

is rigidly prescribed. In the South the cotton factor advances the farmer the money for financing his crop, and the farmer contracts to plant a certain number of acres of a certain crop, cotton for example, and to sell his crop to the factor. In the North a livestock commission firm advances money to the farmer for the purchase of livestock, which he contracts to sell through the firm. This livestock is usually lean cattle but often it is breeding stock and in this case the debt may extend over a number of years and be gradually paid off with the returns from the stock or herd. Such credit is needed on account of the scarcity of local capital and because in some cases the loan is of such a nature that the bank cannot make it. Owing to the factor's special knowledge of the purpose for which the loan is made and his ability to watch its application, he can make the loan at less risk and at a lower rate than the bank.

The extent to which bank credit is used by American farmers varies widely according to the economic development of the community. Where agricultural methods are well established and climatic conditions are such as to preclude the probability of crop failure the farmer enjoys practically the same credit advantages as the merchant. This is due to the peculiarly favorable conditions of American agriculture. Farms are comparatively large and therefore the loans are of sufficient size to make it worth while for the banks to grant the accommodation. The farmers and the bankers belong to the same social class; indeed, the bank is not uncommonly owned and operated by the farmers themselves. Finally, our system of free banking has permitted the establishment of banks wherever they could be made to pay.

Conditions in Cass County, Iowa, may be taken as fairly typical of the banking situation in the better agricultural sections. The county has 17 banks with a total capital of $690,000, total deposits of $3,563,000, and loans aggregating $3,345,000.[1] These banks are located in eight towns of which the largest, with a population of 4560, has five banks. Five towns with populations of 1118, 949, 603, 552 and 490, respectively, have each two banks, and two towns with populations of 266 and 239 have one bank each. All the towns depend on agriculture for their prosperity and the owners and patrons of the banks are mainly farmers.

Holmes estimates that in 102 counties of Illinois 921 banks afford two-thirds of all the personal credit obtained by farmers and that in Vermont the farmers obtain 70% of their credit from the banks, while in the southern states of Virginia, Georgia, Arkansas and Mississippi they get from two-fifths to three-fifths of their credit from the banks. For the country as a whole, outside the South, he estimates that from one-half to seven-tenths of the credit to farmers comes from the banks.[2]

Closely associated with the question of the amount of bank credit to farmers is that of its cost. Contrary to a common opinion, banks are no respecters of persons, and if the farmer pays more for his credit than other classes of producers, it is because it is more expensive to loan to him. As a rule this is the case. In the first place the credit required by the farmer is very different from that required by the merchant. The term is longer, renewals are more frequent, and partial payments are unusual. While the moral risk is good, payments are slow, supervision is more difficult and the average size of the loan is smaller. Altho the farmer's

[1] Bankers' Register, 1912.

[2] Business America, February, 1913, p. 123.

current account deposits have shown a decided increase in the last twenty years, they are not of sufficient importance to warrant the bank in loaning to him against his balance.

Since the average farmer receives his income in lump sums and at infrequent intervals, he makes savings deposits rather than current account deposits. The merchant, on the contrary, receives his income in daily increments, which he immediately puts at the disposal of the banks through current account deposits. Since, therefore, as the banker would say, the merchant is borrowing his own money he is entitled to a somewhat lower rate than the farmer. In a community mainly agricultural the large amount of interest paid on time deposits imposes a heavy burden on the banks. In the South and in the newer states of the West, time deposits usually bring 5% and often 6% interest and as long as such rates must be paid to attract and hold free capital in the community, just so long must the bank's borrowers feel the burden of high interest rates. Finally, since the credit demands of the farmer are not evenly distributed throughout the year, the bank often has idle money which it must invest in short term commercial paper at a rate lower than that charged the farmer for his loan. This is not, however, as is often stated, discrimination against the farmer, for if the bank did not invest in such paper, he would have to pay a still higher rate for his loan.

II. PROPOSALS FOR REFORM

For some years the sentiment has been growing, that agricultural credit facilities in this country are inadequate, that rates are too high, and that in general credit institutions discriminate against the farmer, who has

to get along with unorganized credit and endure the attendant evils. As remedies, there are suggested the formation of coöperative unions for the supply of personal credit and the creation of land mortgage banks, the funds of which shall be obtained through the issue of debenture bonds. Certain states have taken the initiative in this reform by the removal of the restrictions on the formation of coöperative credit unions or by holding out special inducements for the creation of mortgage institutions. During the last two years the question of agricultural credit has claimed the attention of the Federal Government, which, in coöperation with the Southern Commercial Congress, sent a commission to Europe in the spring of 1913 to make a first hand investigation of agricultural credit conditions.[1]

European Methods and Experience

In many European countries, interesting and instructive results have been attained in the development of agricultural credit. It is from France and Germany that the United States has most to learn in this connection. Within the limits of the present article it is possible to give only the briefest outline of the agricultural credit systems of these two countries.

In Germany the greater part of the personal credit of the owners of small and medium sized farms is furnished

[1] This joint commission, composed of (1) the American Commission, organized under the auspices of the Southern Commercial Congress and consisting of delegates from the different states of the United States and the different provinces of Canada and (2) the United States Commission, appointed by President Wilson, was itself known as The American Commission. Its voluminous report contains much valuable information on agricultural credit in Europe. But the essential points are often hidden in a mass of irrelevant material, and the unwary reader is likely to be led astray by inaccurate statements and faulty translations. Moreover, both statistical data and critical analysis are almost completely lacking. But the most serious fault of the report is the acceptance at their face value of the statements of men who, if not partisans of the institutions under discussion, are at least too intimately associated with them to be unbiased in their judgment. As a result, the report conveys altogether too favorable an impression. It would be instructive to compare this report with the above-mentioned English report by Cahill.

by the Raiffeisen coöperative banks. Previous to the formation of these banks, of which the first was founded about the middle of the nineteenth century, there were no organized credit institutions to which such farmers could apply. Hence they were dependent on private lenders and were preyed on by usurers. Their common need and their common racial and religious sentiment facilitated the establishment of the Raiffeisen organization, which was based on the parish community, with the teacher, the priest and the public official as leaders. Out of these elements there grew a credit movement which is the admiration of the world and which has brought untold blessings to the German peasants. Not only has it afforded them ample and cheap credit but through its educative influence it has brought about their social regeneration. But the advocates of a similar system for this country overlook the fact that the conditions which made the German movement successful are almost entirely wanting in the United States. American farmers are not poverty-stricken; they are not victims of the usurer, and they are not without organized credit facilities; in neither race nor religion have they any bond of union; nor is the teacher, the priest, or the official a leader in their community life. Furthermore, the struggle which has been required to create and maintain these institutions in Germany and to keep them true to their original purpose is too little understood in this country.[1]

In France most of the farmers are men of small affairs and without experience in the use of bank credit and they were practically without organized personal credit until the last quarter of the nineteenth century, when such leaders as Durand, Rayneri and Rostand under-

[1] See minority report of The American Commission for an excellent statement on this point. — Sen. Doc. 261, 63d Congress, 2d Session, p. 7 seq.

took to do for France what had been done for Germany and Italy.

The various banks which these leaders founded have rendered splendid service to small farmers, especially in southeastern France. But so great were the obstacles to be overcome that the progress of the movement was slow and consequently the Government felt called upon to undertake the reform of agricultural credit. After various attempts, it finally created a system of local and regional banks, which derived their funds from free grants by the Bank of France. These banks have made loans to farmers at the discount rate of the Bank of France and often at a much lower rate. Yet, despite the tempting rates, the French farmers, much to the chagrin of the Government, have availed themselves of but a small portion [1] of these funds. No adequate provision for the reimbursement of the State has been made.

In Germany a large part of the mortgage loaning is done by institutions especially organized for the purpose: (1) the Landschaften, which are coöperative associations of borrowers; (2) the State and Provincial Banks, which are public institutions and (3) the Joint Stock Mortgage Banks which are commercial institutions organized under the Imperial Mortgage Bank Act of 1899. Of the other institutions which make mortgage loans, the savings banks are the most important. The total farm mortgage indebtedness in Germany is approximately $2,000,000,000, and of this slightly over one-half is borne by the specially organized institutions, as follows; (1) the Landschaften, $750,000,000; (2) the State and Provincial Banks, $100,000,000, and (3) the Joint Stock Mortgage Banks, $170,000,000. The

[1] Of the 100,000,000 francs withdrawn from business for agricultural credit but 42,000,000 francs are actually employed by farmers. People's Banks, H. W. Wolff, 1910, p. 449.

savings banks bear $850,000,000. The special mortgage credit institutions derive funds from the sale of bonds issued against long time non-foreclosable mortgages. The savings banks, however, make the bulk of their loans against short time, foreclosable mortgages.

The 3.5% bonds of the Landschaften sell at the present time around 95 and net the investor about 3.7%. The addition of ½% to this rate to cover the costs of administration and the contribution to the reserve fund makes the farmer's rate from 4 to 4.5%. He also pays the costs of appraisement and of making out the papers. The rates of the State and Provincial Banks and of the savings banks are slightly higher, while those of the joint stock mortgage banks are from ½% to ¾% higher. That German farmers enjoy exceptionally favorable rates is shown by the fact that Landschaft bonds bearing the same rates as Government securities are usually quoted only from 1 to 2 points below the latter.

The only special mortgage loan institution in France is the Crédit Foncier, founded in 1852. This institution was intended to render to the farmers of France the same service which the Landschaften render to those of Germany. It enjoys a monopoly of the right to issue real estate mortgage bonds, and has become a powerful and world-famed institution. But it has signally failed to realize the hopes of its founders. Of the total rural mortgage indebtedness of France, amounting to about $3,000,000,000, a little less than $\frac{1}{10}$ is borne by the Crédit Foncier. Bonds recently issued (*e. g.* in November, 1912) bore a 4.5% rate. To this must be added the .6% allowed for administration and the expense of making the loan, which the farmer pays and which in France is very heavy. Therefore, the French farmer is paying about the same rate as the farmers in the best agricultural districts of the United States.

Impressed by the fact that in Europe debenture bonds play so important a part in mortgage loans, the advocates of the reform, whether state or federal, of mortgage credit in this country, base their various schemes on the issue of debenture bonds. But these enthusiasts have failed to understand the limitations of this very delicate credit instrument and, owing to lack of sufficient information, have exaggerated the success of Europeans in making debenture bond loans; and furthermore, they have not attached sufficient weight to the great differences between European and American conditions.

The debenture bond resembles the railroad bond and the industrial bond in being impersonal, since the borrower and the investor do not come into personal relation with one another; but it differs from them in being issued, not against a unit of property, under one management, but against a constantly changing mass of unrelated units of property, of which the management, in a country like the United States, may undergo a complete change in the course of a few years.[1] Owing to this peculiarity of the security of debenture bonds, the greatest caution must be exercised in their issue. Among the farms constituting the security, there must be uniform conditions, well established agricultural practices, little danger of disaster from crop failure or other cause and comparative absence of the speculative element from land values. Evidently the requirements are more nearly met in Europe than in the United States. In the greater part, indeed, of the agricultural area of our country they are not met at all. This is true of most of the South, most of the region west of the Missouri river and considerable parts of our best

[1] In the United States as a whole, in 1909, 30% of all farm owners operating their farms and 38% of all such owners whose farms were mortgaged had occupied their farms for less than five years. — Census Bulletin, Stability of Farm Operators, or Term of Occupancy of Farms, p. 1.

agricultural states, for instance, northern Michigan, northern Wisconsin, northern Minnesota and southern Illinois. And even in the same communities there are often wide variations in this respect.

The accurate appraisement of farms against which debenture bonds are to be issued is of the greatest importance. But it is exceedingly difficult, because farm incomes are subject to wide variation and farmers do not, as a rule, keep books. Hence, wherever debenture bonds are issued to a considerable extent, the appraisement is performed by public authorities, or if not, is usually based on public tax valuations. In Germany, the Landschaften make their own appraisement, but usually on the basis of the tax assessment lists; and the same method is used by those joint stock mortgage banks which, owing to their having been established before the law of 1899, are permitted to make their own appraisements.

Owing to its extreme centralization, the great mortgage bank of France, the Crédit Foncier, has found appraisement difficult and expensive; a fact which has tended to restriction of its farm mortgage loaning.

It is hardly necessary to point out that in the United States there is little to guide us in making appraisements. Changes in ownership are frequent, farmers keep books much less than in Europe, and tax valuations afford no guide whatever. Since debenture bonds are issued against long term loans, there must be supervision of each loan after it is made, to insure that the claims of the contract shall be lived up to, the taxes paid, depreciation of the property prevented, and so on. And as mortgages are gradually paid off and new ones substituted, great care must be exercised to prevent the impairment of the general security for the bonds through the substitution of inferior risks. In the

United States the expenses of appraisement and supervision incident to the making of debenture bond loans would be much greater than in Europe, and still further expense would result from the greater uncertainty of land titles.

The great cost of making debenture bond loans accounts for the fact that in Europe the small farmers have not been able as a class to avail themselves of the advantages of such loans, since the profits are more than offset by the cost of making them. Furthermore, while it is generally conceded that in the long run the small farmer is as good a risk as the large farmer, yet owing to his lack of reserves, there is greater danger of foreclosure or forced management; and these would involve expense out of all proportion to the size of the loan.[1] And finally investors are prejudiced against mortgage bonds issued against a mass of small loans.

The Landschaften are composed chiefly of large farmers. They do make some very small loans, it is true, but the number of such loans is comparatively insignificant and the average size of the loans is large. The joint stock mortgage banks of Germany loan almost exclusively to large land owners. The Crédit Foncier also confines its loans chiefly to large farmers, as the expense involved makes loans under \$1000 unprofitable.[2] In 1912 the average size of its agricultural loans was \$5000. The mortgage bond institutions of Italy grant each year only a very small percentage of the loans applied for. That the small farmer is not served is

[1] "Small landed properties are more wastable than is supposed, and require, owing to their various peculiarities of tenure and their shifting exigencies (registration and cancellation of charges, . . . postponement of payment, repayment of sinking fund accumulation, etc.), an amount of labour and time quite out of proportion to their profitableness." — From an annual report 1909 of the largest German mortgage bank, quoted by J. R. Cahill in a Report to the (English) Board of Agriculture of an Enquiry into Agricultural Credit and Agricultural Coöperation in Germany, 1913.

[2] Fustier, L., Réconstitution de la petite propriété rurale (1911), p. 69.

shown by the fact that in 1912 the average size of their farm loans was $18,000.

This inability of the credit institutions to satisfy the needs of the small farmer has led the various governments to come to the rescue by the establishment of special state aided institutions. In Germany these are the State and Provincial banks, noted above. In Denmark the constant complaint of the small land owners led to the establishment of special institutions, the bonds of which are guaranteed by the state. In France a recent law provides for state loans to small farmers.

The inability, however, of the debenture bond system, even with state aid, to meet the needs of the small farmer is illustrated by the history of the German state and provincial institutions. They have been excellently managed, and no pains have been spared to win the support of the small farmers. But while numbers of small farmers have been accommodated, the rigidity of the system leads many to prefer to patronize the savings banks or the private lenders despite the greater risk of foreclosure.

A further illustration of the inability of the debenture bond system to adjust itself to agricultural conditions is afforded by the fact that in Germany during the past decade the greater part of the new mortgage loans have been made, not by the debenture bond institutions, but by non-specialized agencies, altho the former have greatly increased the amount of their loans in other directions. This situation calls for some explanation. In the first place, with the increase of mortgage indebtedness in Germany there has been an increase in the proportionate number of the less desirable risks and also an increase in the percentage of mortgage indebtedness on the old risks, with a resulting decrease of the margin of

safety. Under such conditions, amortization is necessary as a means of security. But these very conditions make it difficult to exact amortization. Even farmers favorably situated as to debt find amortization payments burdensome. In Germany and Denmark, where it was formerly the general custom to require amortization of long time loans, the amortization principle was found to be unsuited to farming conditions; and except in the case of the German joint stock banks,[1] it has been practically abandoned save when amortization is needed to give added security.[2] It is perfectly evident that in the United States compulsory amortization would debar from credit not only the farmers of the newer regions where capital is scarce, but also those farmers of the older regions who are seeking to become owners and whose capital has been exhausted by the first payments.

Secondly, it has been found in Europe increasingly difficult to market the debenture bonds at favorable rates owing to growing competition of other securities.[3] In this country it has been generally assumed that such bonds would be so eagerly sought by investors that they would bear a rate of interest second only to that borne by bonds of the Federal Government. The probable rate has been estimated at 5% and by many even at 4%. Here again, European experience has been disregarded. The bonds of the early Landschaften had the moral

[1] Moreover certain of these banks make some non-amortizable loans. For example, of the 211 loans made in 1912 by the Land Mortgage Bank of the Rhine, 34 were non-amortizable. — Senate Document 214, p. 322.

[2] "As a rule, in Prussia, the mortgages are never paid off;" when a farmer, for example, "has paid back, say 20,000 marks, he goes to the landschaft and asks for those 20,000 marks back again, and so the business continues." — Senate Document 214, p. 258.

[3] The markets of the West, in particular those of Austria and Germany, which are of paramount importance for Hungary, have been simply flooded with securities issued in the respective countries. Senate Document, no. 214, p. 134.

support of a powerful king. In the oldest Landschaften[1] the security included all the property of the district, and in later times it has included all that of the borrowing members. The bonds were issued at a time when land was a chief source of wealth and therefore the main field of investment; and before the Landschaften were obliged to meet any considerable competition, their bonds had already become familiar to investors and gained their confidence — confidence, it should be added, which has never been abused. But despite these favoring conditions, the bonds have gained only a local market, and the attempt to broaden the market by the formation of a Central Landschaft was unsuccessful. It is admitted that under present conditions, the Landschaften cannot make loans at lower rates than can unorganized agencies. So that the only inducements they can offer borrowers are the longer term and the pre-payment privilege.

The Crédit Foncier, as is well known, resorts to a lottery to facilitate the sale of its bonds, but it does not attempt to compete with unorganized agencies for the mass of French farm loans.

If in Europe, despite the favoring conditions, the farm debenture bond finds a market with difficulty owing to the competition of other securities,[2] how many times more difficult would be the marketing of such bonds in the United States, where such favoring conditions are wanting, and the obstacles to be overcome are much greater! In this country land is not regarded, as in Europe, as the foundation of national prosperity, and land ownership is not the basis of social distinction both among people of high and of low degree, nor is there the

[1] With the exception, however, of the Landschaft of Kur- und Neumark.

[2] " The development of industry has produced a condition whereby these bonds are not as generally acceptable as before. . . . At the present time, therefore, there is greater difficulty than before in placing the bonds." — Statement of the Director of the Landschaft of Halle, Senate Document 214, p. 365.

same devotion to the farm home. And furthermore, social conditions are not such that farmers would be willing to assume joint liability. Our experience with land banks and debenture bonds has not been so fortunate as to inspire confidence in new ventures in this direction; and while it may be readily conceded that a repetition of the mistakes of former years may be avoided, it will take some effort to overcome the prejudice which these mistakes engendered.

Furthermore, the debenture bond would have to meet the competition of a flood of securities with which investors are thoroly familiar and in which they have confidence. Apart from corporation and municipal bonds, which have a wide market, there are in every locality, county, village and school district bonds which are backed by the taxing power of the community and the issue of which is carefully guarded. Such bonds, with few exceptions, bear a rate of interest much higher than that which the enthusiastic advocates of debenture bonds expect them to bear. How can it be expected that investors will pay more for a bond secured by a farm than for a school district bond practically secured by the mutual guarantee of all the farmers of the community ?

Finally, there are already in the field excellent agencies — mortgage companies — with well established reputations and large assets, which give the investor all the advantages held out by the debenture bond company, with the added advantage, as regards securities, of having the individual mortgage turned over to him. And it is difficult to see wherein the debenture bond company could offer the borrower lower rates of interest or, in general, any better terms than these companies offer. The supposed advantage of market ability which is claimed for the debenture bond is of but little

practical moment, since, as we have seen, the market for such bonds is very restricted, and they are usually bought as a permanent investment.

Nor has state aid been of any great assistance in increasing the marketability of the bonds or, in general, in advancing the cause of agricultural credit. The state never allows itself to be treated as the ordinary investor. It always requires more and gives less. Making the bonds of the Landschaften legal investment for trust funds and the like has made it harder, Trosien [1] declares, for farmers to obtain credit from these institutions, because it has forced the latter to employ more rigid methods in making loans.

Not only does direct financial aid by the state tend to demoralize the individual, but in the long run it also dries up the sources of credit. This is the testimony of most of the Europeans who have given their lives to the solution of the problems of agricultural credit. Some of them at first advocated state aid; but when confronted with its results, they became its ardent opponents. In response to appeals from the leaders of the coöperative credit movement, for example, the Prussian Government established the Prussian Central Coöperative Bank; but despite the excellent management of the bank, it soon became apparent that it was stifling the coöperative credit movement, and the latter has for some time been trying to shake itself free from the Bank's grasp. In a recent letter to the writer, a leading German professor of economics states, " It is true that the central coöperative banks of the farmers, namely, the Agricultural Central Loan Bank of the Raiffeisen coöperative societies and the Agricultural Imperial Coöperative Bank in Darmstadt have not thriven well. The main reason is, that the Central Coöperative Bank

[1] Trosien, p. 27.

founded in Prussia with the aid of an interest-bearing state loan, has drawn to itself the equalization business of the provincial central coöperative banks. The Prussian Central Coöperative Bank is very cleverly and energetically administered, so that the competing institutions were in a difficult position." At the International Coöperative Congress in 1894, the question of state subventions received much attention. A few extracts will show the drift of the statements made on this occasion by the European leaders. Doctor Alberti of Germany declared, "Every manner of subvention by the state must be rejected. And my opinion, supporting this argument, is based on forty years' experience." Herr von Elm expressed strong objection to state aid and said that the state should confine its efforts to education and emancipating laws, that it should, "give the agriculturists elbow room and let them alone." M. Füredi of Hungary stated, "In spite of state aid lavished on the central credit organization, the rate of interest is 7 to 8% for money advanced by the state gratis out of the taxes"; and Doctor Karacsonyi, also of Hungary, declared, "There are no successes to be put to the credit of state aid. Money so lightly got is the producer of extravagance." Similar utterances came from Wrabetz of Austria, and from Chiousse and Durand of France.

Legislation Proposed

In conclusion, a sketch may be given of the bills now pending in Congress for promoting agricultural credit.

The American Commission published its report in the autumn of 1913; and about the same time a bill known as the Fletcher Bill,[1] the provisions of which were

[1] S. 2909, 63d Congress, 1st Session.

supposed to embody the opinions of the Commission, based on their European inquiries, was introduced in the Senate. It provided for the formation of local and state land banks and a federal land bank situated at Washington. The local banks were to issue debenture bonds, which were to be guaranteed by the state bank, and if necessary by the central bank; and financial assistance from the United States Treasury was provided for.

Altho the Fletcher bill was supposed at the time to embody the opinions of the Commission, it did not meet with the approval of the Administration, and was subsequently withdrawn. In its place there was introduced, with the approval of the Administration, the Moss-Fletcher Bill.[1] This provided for the establishment of National Farm Land Banks to be under the immediate direction of a special Commissioner, who should preside over a Bureau of Farm Land Banks to be created in the Department of the Treasury. Such banks might be organized by any ten persons contributing a minimum capital of $10,000, of which 50% was to be immediately paid up. They were empowered to accept local deposits up to 50% of their paid up capital and surplus, to receive postal savings funds to the same extent on a par with other Government depositories, and even to engage in general banking business. But their chief power lay in their right to issue debenture bonds against rural real estate mortgages for a period not exceeding thirty-five years. Bonds were to be issued only against loans running for more than five years. The bond issue was limited to 15 times the capital and surplus of each bank and was to be secured by first mortgages on farm lands located in the state where the bank was situated. An attempt was made

[1] H. R. 12,585, 63d Congress, 2d Session.

to give standing to the bonds by making them legal investment for time deposits of national banks and of savings banks in the District of Columbia and for trust funds and estates administered by the United States courts, and by providing that they might be used as security for loans from national banks to national farm land banks or to individuals. The value of the mortgages was to be at least equal to the par value of the bonds outstanding. The rate of interest charged for the loan should not exceed the rate on the bonds by more than 1%, which should cover all administration charges. The bill also prescribed the purposes for which loans might be secured: (*a*) to "complete the purchase of agricultural lands mortgaged; (*b*) to improve and to equip such lands for agricultural purposes; and (*c*) to pay and discharge debts secured by mortgages or deeds of trust on said lands." Loans were not to exceed 50% of the value of improved farm lands, or 40% in the case of unimproved land. The appraisement was to be made by a committee of three, appointed by the board of directors from their own body.

Numerous other bills were also introduced at about the same time as the Moss-Fletcher Bill, among which the Bathrick bill deserves attention.[1] This provided for loans by the Government, at a rate not to exceed $4\frac{1}{2}$%, to farmers direct or through farm credit associations which should become surety for all mortgages made through them. The Government was to borrow, at a rate not to exceed $3\frac{1}{2}$%, the funds to be used for this purpose; and the distribution of such funds was to be made by a bureau to be established in the Department of Agriculture.

Extensive hearings on the Moss-Fletcher Bill were held, during which the impression gained ground

[1] H. R., 11,897.

among members of Congress that this was not radical enough to satisfy the farmers, that it was a bankers' bill drawn in the interest of the lenders rather than of the borrowers, and that it was inadequate to afford the needed relief. It was claimed that the Bathrick Bill had the support of the farmers' organizations. The hearings also brought out the fact that the Moss-Fletcher Bill by no means met the unanimous approval of the members of the Commission.[1] The upshot of the matter was that the Moss-Fletcher Bill was withdrawn and the Committee on Banking and Currency gave out the statement that an expert had been summoned to draw a new bill. This was subsequently introduced under the name of the Federal Farm Loan Act.[2]

The Federal Farm Loan Bill differed radically from its predecessors. It aimed to create a system analogous to the newly established federal bank system. Its administration was placed under the control and direction of the Federal Reserve Board, which was to appoint a Farm Loan Commissioner. Any number of natural persons not less than five might form a National Farm Loan Association, whose application for a charter must be passed upon by the Farm Loan Commissioner. The capital stock of such an association should not be less than $10,000; and this stock might be taken on the Building and Loan Association plan. The coöperative principle was also recognized in the provision that loans should be made to shareholders only. The association was to have the power to make loans on first farm mortgages only, the rules governing the making of the loans following the general lines of the Moss-Fletcher Bill except that no power to issue bonds was

[1] Those members of the Commission who were opposed to the bill subsequently issued a minority report stating the reasons for their opposition.

[2] H. R., 16,478.

granted the association and that appraisal was placed in the hands of the Farm Loan Commissioner.

The Federal Reserve Board further was to establish as many Federal Land Bank Districts as there are Federal Reserve districts. In each one of these districts there should be organized a Federal Land Bank, with nine directors, three appointed by the Board, six elected by the farm associations. Each association must subscribe for at least $1000 of capital stock of the Land Bank and each Land Bank must, before beginning business, have at least $500,000 in capital stock. In case a bank failed to get this amount subscribed " it shall be the duty of the Secretary of the Treasury to subscribe the said unsubscribed balance." The Land Banks (not the associations) were to have power to issue, subject to the approval of the Federal Reserve Board, and to sell farm loan bonds at a rate of interest on such bonds not to exceed 5%. The trustees of the postal savings banks were directed to employ in the purchase of farm loan bonds, if they could be obtained below par, the funds withdrawn from postal savings depositories; and they might use their discretion in purchasing them at par. It was further provided that the Secretary of the Treasury, on application from one or more of the Federal Land Banks, should purchase from the Land Banks farm loan bonds not previously issued or sold, in an amount not to exceed $50,000,000 in any one year. Varied and far-reaching powers of supervision were given to the Federal Reserve Board.

This bill should have met the approval of those who believed that the Moss-Fletcher Bill did not go far enough. It was certainly not a bankers' bill, because all chance for private initiative and all possibility of profit were shut out. Moreover, there was a superabundance of Federal supervision and financial assistance. But

this Federal assistance was made dependent on the formation by private initiative of farm loan associations and the bill carefully removed all incentive to such action.

The Administration, however, soon let it be known that it was unalterably opposed to the granting of financial aid by the Federal Government, and all attempts to put through a rural credits bill were abandoned for the current session.

A perusal of the numerous bills presented and of the voluminous reports of the hearings must convince one that there is an utter lack of adequate information as to the actual credit needs of the farmer and of the extent to which existing agencies are supplying them. And moreover, when one studies the measures in detail he discovers that instead of profiting by the experience of Europeans our legislators have proposed measures which these have avoided or abandoned. Credit agencies in great variety have come into being in the United States to meet the demands of an undeveloped, unstandardized agriculture. The evils of this lack of credit organization have been greatly exaggerated, but the time has probably come for more organization. Such organization must, however, be attained gradually, and adapted to the peculiar conditions of this country. European methods must be used with caution. It is exceedingly doubtful, for example, whether the debenture bond system is feasible for any considerable part of the country. If European experience has anything to tell us about state aid, it is " Beware."

While there is need of federal legislation, the bills thus far introduced have provided for too much centralization and too much federal interference in a country as large as this and with such varied conditions. A general plan of organization for the entire country is requisite;

but it should be left to the individual states to determine the practical details of administration and control. The conditions of agriculture in this country do not warrant special legislation, such as has been proposed, limiting the operations to agricultural land; nor are the farmers asking for it. Not only does such legislation do violence to our political sense, but in this particular case it would defeat its own end.

In the final analysis, the solution of the problem of rural credit is in the hands of the farmers themselves. They must put their business on a more efficient basis and must learn to work together for their mutual interest. The former is a problem of farm management, the latter, one of rural organization. That the shortcomings of the American farmer in both these fields have at last been forced on the attention of the nation is evidenced by the many praiseworthy efforts which are now being put forth by so many agencies to remove these obstacles in the way of agricultural progress.

JESSE E. POPE.